

Appl. No. 10/050,476
Resp. dated March 27, 2006
Reply to Office Action of January 6, 2002

REMARKS

Applicants have carefully reviewed the Office Action mailed January 6, 2006 in which claims 1-8, 10-12, 16, 17, and 21-23 were rejected. Claims 18-19 have been withdrawn from consideration and claims 9, 13-15, 20 and 24-32 were previously cancelled.

Rejections under 35 U.S.C. § 103

Claims 1-8, 10-12, 16, 17 and 21-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Peters et al., U.S. Patent No. 5,549,552 (hereinafter "Peters") in view of Ichinose et al., U.S. Patent No. 5,681,402 (hereinafter "Ichinose"). Applicants respectfully traverse this rejection. In order to render a claim obvious, there must be some motivation to combine the references, and the motivation or suggestion must be found in the cited prior art. See M.P.E.P. §2143.01. In addition, references cannot be combined to render a claim obvious if either of the references are from a non-analogous art area. See M.P.E.P. §2141.01(a).

Claim 1 recites, in part, a metallic tubular member with a polymeric tubular member disposed over at least a portion of the metallic tubular member, forming a lap joint. A coupling agent comprising a functionalized titanate is disposed between the metallic tubular member and the polymeric tubular member within the lap joint. Further, claim 16 recites, among other elements, a coupling agent disposed between the metallic tubular member and a polymeric tubular member in a lap joint, the coupling agent being a functionalized titanate.

Peters discloses a balloon dilation catheter with improved pushability, trackability and crossability. The catheter shaft can have an outer tube and an inner tube. For example, Figure 2 appears to show an outer tube 35 disposed about an inner tube. The inner tube can comprise a proximal inner tube 33 and a distal inner tube 34. The proximal and distal inner tubes can be

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attached by various methods (see Column 7, lines 14-16). In attaching the distal and proximal inner tubes, a suitable medical grade adhesive such as cyanoacrylate or urethane may be used to secure the lap joint (see column 7, lines 21-23). Peters states a lap joint length of about 3 to 5 mm with cyanoacrylate or urethane provides sufficient bond strength (see column 7, lines 46-49).

Ichinose discloses a structure for a photovoltaic element. In several embodiments, the collecting electrodes of the photovoltaic element are wires with one or more layers disposed on the wires. For example, as shown in Figure 1A, a wire 101 can have a coating layer 102. "The coating layer 102 is formed from heat curing conductive adhesive or thermoplastic conductive adhesive, and its function is to mechanically and electrically connect the main part of the collecting electrode to the photovoltaic element substrate." (Column 10, lines 21-25)

Applicants assert that one of ordinary skill in the art would not be motivated to combine these two references. Neither reference contains, either explicitly or implicitly, a suggestion or motivation to combine the references. In combining Peters with Ichinose, the result would be a medical device that uses conductive adhesive in its construction. Neither Peters nor Ichinose contain a suggestion or motivation for placing a conductive adhesive anywhere in a medical device, much less between a metallic tubular member and a polymeric tubular member in a medical device, as required by claims 1 and 16. Peters does not mention a need to conduct electricity through this or any portion of a medical device. Further, Ichinose does not mention anything about the desirability of using a conductive adhesive in the construction of medical devices. Neither of these references has an explicit motivation or suggestion to combine the subject matter of these patents.

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In addition, neither Peters nor Ichinose contains an implicit suggestion or motivation to combine these references because the nature of the problem to be solved is so different between Peters and Ichinose, and Applicants assert that one of ordinary skill in the art would not be motivated to combine these references.

M.P.E.P. §2143.01 states "the test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." Here, the problems being addressed in Peters and Ichinose are completely unrelated. Peters discusses some catheter designs that have improved pushability, trackability and crossability. In Ichinose, the problem being addressed is making a good electrical connection between a collecting electrode and a photovoltaic substrate. Thus, not only is the geometry and use different between the structures of these two references (Peters connects two elongate members of a medical device and Ichinose connects a wire to a flat surface in a photovoltaic), but the problems being addressed are also completely unrelated. Because the problems to be solved in these two references are completely unrelated, one of ordinary skill in the art would not think to combine these references. Because neither Peters nor Ichinose contain a suggestion or motivation, either explicit or implicit, to combine these references, these references cannot be combined for the purposes of obviousness. In rejecting the claims, the only source that does provide motivation for the combination of elements in claims 1 and 16 is the current Application, and using this source for the motivation is an impermissible use of hindsight. See M.P.E.P. §2145, Part X.

Further, Applicants assert that Ichinose and the current invention are in non-analogous art areas. According to M.P.E.P. §2141.01(a), references from non-analogous art areas cannot be used to render a claim obvious. "In order to rely on a reference as a basis for rejection of an

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applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." Here, the Ichinose reference is undoubtedly outside the field of Applicants' endeavor. Specifically, the field of producing photovoltaics is not even remotely related to the field of medical devices. Further, Ichinose discusses the attachment of a collecting electrode to a photovoltaic element substrate using a conductive adhesive.

When compared to the structure of the current invention, the disclosure of Ichinose is completely different in structure, materials and purpose. In Ichinose, a collecting electrode, for example a conductive wire, is attached to a photovoltaic substrate, such as a semiconductor material. An electrical connection is desired between these two elements, so a conductive adhesive is used. The problem addressed in the current application (attaching two elongate elements to one another in a medical device) is not even closely related to the problem of forming an electrical connection between a collecting electrode and a photovoltaic substrate. Applicants do not see how making a good electrical connection is even close to being reasonably pertinent to the issues in the current Application. Because Ichinose is not analogous art, it cannot be used to reject the claims of the current application.

For the foregoing reasons, Applicants respectfully submit that the combination of Peters and Ichinose cannot properly be used together to render claims 1-8, 10-12, 16, 17 and 21-23 obvious because there is no motivation or suggestion in the prior art to combine the references and because Ichinose is non-analogous art to the current application.

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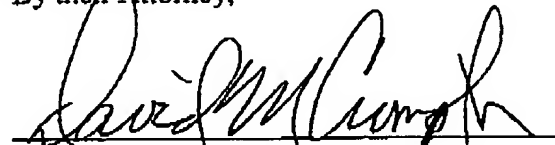
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Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Lixiao Wang et al.

By their Attorney,

Date: 3/27/06

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